**WAP for developing an IIOT application for energy monitoring and**

**optimization**

const int ledPin = 5; // LED connected to digital pin 5

const int 1drPin = A0; // LDR connected to analog pin A0 (assuming Ao as an example

void setup()

{

}

Serial.begin(9600);

pinMode(ledPin, OUTPUT);

pinMode(1drPin, INPUT);

void loop()

{

// Start serial communication at 9600 baud rate

// Set ledPin as an OUTPUT

// Set 1drPin as an INPUT

int ldrstatus = analogRead(IdrPin); // Read the LDR value

if (ldrStatus <= 320) // If it's dark

{

}

else

(

digitalWrite(ledPin, HIGH); // Turn on the LED

Serial.print("Darkness over here, turn on LED. LDR Value: ");

Serial.println(ldrStatus);

// If there's sufficient light

digitalWrite(ledPin, LOW);

// Turn off the LED

Serial.print("There is sufficient light, turn off the LED. LDR Value: ");

Serial.println(ldrStatus);

}

delay(1000); // Wait for 1 second before the next loop

}

